

How Effective are Medications in Alleviating Pain in Cancer Patients?

AN INTRODUCTION

Background

Cancer has a major impact on society in the United Kingdom and around the world. Despite advances in prevention, early detection and more effective treatment modalities, cancer remains one of the most debilitating and deadly diseases in modern times (Jemal *et al.*, 2014). As of 2012, there have been over 14 million new cases of cancer worldwide with over 8 million deaths caused by the disease (Cancer Research UK, 2017). An individual's risk of developing cancer depends on various factors including age, genetics, and exposure to risk factors. The prevalence of risk factors differ according to region and country this may be the reason why overall cancer rates and common types of cancers also vary by country or region (Cancer Research UK, 2017). In the UK, there is an estimated 2.5 million people living with cancer, a portion that is predicted to rise to 4 million by 2030 (Macmillian, 2015).

According to Maddams *et al.* (2012) and projections conducted by Macmillian Cancer Support (2015) the number of people in the UK living with cancer has increased by almost half a million in the last five years. Maddams *et al.* (2012) has also projected that the number of people living with cancer in the UK is increasing steadily by 3.2 per cent annually. This constant steady increase in the number of cancer patients each year is pushing researchers and medical professionals to conduct innovative research and produce treatments that can aid in the curbing the prevalence of cancer.

Data from 2014 in the UK illustrates that 53 per cent of new cancers are associated with breast, prostate, lung or bowel cancer (Cancer Research UK, 2017). Furthermore, more than half of new cases of cancer in males is prostate, lung or bowel while more than half of new cases of cancer in females is related to breast, lung, or bowel cancer (Cancer Research UK, 2017). The sheer potential for suffering from cancer in itself can be a horrifying experience for patients, while pain is considered the most frightening of all cancer symptoms for patients (Winslow *et al.*, 2005; Nersesyan and Slavin, 2007). Colvin *et al.* (2006) have found that pain occurs in up to 70 per cent of patients with advanced cancer and about 65 per cent of patients dying of non-malignant disease.

Nersesyanyan and Slavin (2007) argue that more than half of cancer patients have insufficient pain control and about more than a quarter of patients actually die in pain. Early statistical evidence published by the American Cancer Society (2002) shows that from 50 to 70 per cent of people with cancer experience some degree of pain, this intensifies as the disease progresses. Of these patients, less than half get adequate relief of their pain which results in a negative impact on their quality of life (American Cancer Society, 2002). Pharo and Zhou (2005) studied the incidence of pain in advanced stages of invasive cancer and found that incidence reaches 80 per cent and it is in 90 per cent found in patients with metastases to osseous structures.

Research such as Holton *et al.*, (2007); Brevik *et al.*, (2009); Hovind *et al.*, (2012); Manzano *et al.*, (2013); Wengstrom *et al.*, (2014); to name a few, is still ongoing to find methods of alleviating acute and chronic pain for patients suffering from different forms of cancer. According to the WHO cancer pain treatment is developed using a treatment ladder in which the initial step in pain management is composed of using nonopioid analgesics, such as acetaminophen, aspirin, NSAIDs (i.e. ibuprofen or ketorolac), and selective cyclooxygenase Type 2 inhibitors (i.e. rofecoxib, celecoxib, and valdecoxib). Debate over the use and effectiveness of various medications is central to pain management and quality of care given to patients with cancer (Schug *et al.*, 1990). There are several other invasive techniques available for pain management of cancer patients (Taub, 2003).

Research Aims & Objectives

The primary research question for the current study is; are medications effective in alleviating pain in cancer patients? Using the developed research question the aims and objectives of the study can be developed to guide research.

The primary aim of the current study is to analyse the effectiveness of medications in alleviating pain in cancer patients in the UK using literature review. In order to achieve this aim objectives have been composed as follows;

- 1.** Use current peer-reviewed academic papers to evaluate different approaches of cancer pain management.
- 2.** Analyse the role of medication in alleviating pain in cancer patients.

3. Use the method of a systematic literature review as described by Caldwell *et al.* (2011) to analyse the results of current peer-reviewed research on the topic of interest.

Based on these objectives and aims the primary themes being studied in the current review are:

1. Pain management of adult cancer patients
2. Use of medication for pain management in cancer patients
3. Patient satisfaction with pain management strategies

Justification of Research

As mentioned earlier many patients with cancer have insufficient pain management regimes causing some to die from the intense experience of pain. By researching this particular topic a comprehensive analysis can take place by analysing existing literature. Results from the research can provide medical professionals insight into the actual effects of pain medication on cancer patients. This gradual rise of deaths caused from cancer can be curbed by understanding the intricate relationship between pain and the patient in order to provide improved pain management and overall quality of healthcare delivered. Improving the patient experience with dealing with pain can improve the overall quality of healthcare delivered and increase patient satisfaction. There are also personal justifications for conducting this research including the experience of seeing a loved one suffer from inadequate pain management. In addition, nursing staff can gain knowledge from the results of the current study which contributes to existing literature, this may aid in improving the care that oncology nurses may provide to cancer patients.

Ethical Stance in Research

The ethical stance taken in the current study is based on the principles of systematic literature review. In systematic literature reviews the findings of existing studies themselves become the raw data that is later used for analysis and interpretation. In order to maintain an ethical study it will be imperative to indicate in areas of the dissertation the use of findings from published authors to ensure that credit of initial findings goes to them and is not being plagiarised.

In order to treat the work of existing researchers accurately and fairly they will be analysed using a single framework. Also, the findings of one study may not be overly emphasised with the others.

When using the findings of the existing research in the current systematic review the researcher will limit themselves to reports and information that is already public domain. The researchers of the studies being reviewed will not be contacted for more details. Also, research will only be included if the research has indicated that it has used participants' consent to gather data. This will ensure that data being used and analysed is ethical. It is sufficient to consider that participants had given permission for the activities conducted by researchers whose study is being used. Therefore, even if they (i.e. participants) didn't give permission for the current review, the data being used is already public domain. In cases where there is concern over the ethics of the research being analysed the paper will not be included in the current review.